PATENT
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IN THE CLAIMS:

Claims 8 – 13, 19 – 23, and 25 – 29 have been amended.

1. (original) A remote virtual network interface, comprising:

an Ethernet receiving element in communication with an Ethernet node;

an Ethernet transmitting element in communication with the Ethernet

node;

an InfiniBand receiving element to receive a data packet from a first

InfiniBand node, wherein the data packet includes a destination indicator;

a detector to read the destination indicator and to compare the destination

indicator to a known value; and

a routing element to deliver the data packet from the InfiniBand receiving

element to an InfiniBand transmitting element, wherein the InfiniBand transmitting

element transmits the data packet from the first InfiniBand node to a second InfiniBand

node.

2. (original) The remote virtual network interface according to claim 1, wherein

the destination indicator is a destination media access control ("MAC") address.

3. (original) The remote virtual network interface according to claim 1, wherein

the known value is a range of media access control ("MAC") addresses.

4. (original) The remote virtual network interface according to claim 1, wherein

the detector and the routing element are within a single device.

5. (original) The remote virtual network interface according to claim 1, wherein

the remote virtual network interface is virtualized by implementing microcode in a

network processor.

6. (original) The remote virtual network interface according to claim 1, wherein the remote virtual network interface is virtualized by implementing microcode in a set of integrated circuits.

7. (original) A network system, comprising:

an Ethernet node to receive a first data packet from a remote virtual network interface;

an Ethernet switch to select the Ethernet node to receive a second data packet;

a first InfiniBand node to transmit a data packet to the remote virtual network interface, wherein the data packet includes a destination indicator; and

an InfiniBand switch to select a second InfiniBand node to receive the data packet from the first InfiniBand node, wherein the remote virtual network interface includes

an Ethernet receiving element in communication with the Ethernet node,

an Ethernet transmitting element in communication with the Ethernet node,

an InfiniBand receiving element to receive the data packet from the first InfiniBand node,

a detector to read the destination indicator and to compare the destination indicator to a known value,

a routing element to deliver the data packet from the first InfiniBand node to the second InfiniBand node, and

an InfiniBand transmitting element to transmit the data packet from the first InfiniBand node to the second InfiniBand node.

8. (currently amended) The network system according to claim [[6]] 7, wherein the destination indicator is a destination media access control ("MAC") address.

9. (currently amended) The network system according to claim [[6]] 7, wherein the known value is a range of media access control ("MAC") addresses.

10. (currently amended) The network system according to claim [[6]] 7, wherein the detector and the routing element are within a single device.

11. (currently amended) The network system according to claim [[6]] 7, wherein the remote virtual network interface is virtualized by implementing microcode in a network processor.

12. (currently amended) The network system according to claim [[6]] 7, wherein the remote virtual network interface is virtualized by implementing microcode in a set of integrated circuits.

13. (currently amended) The network system according to claim [[6]] 7, wherein the first data packet and the second data packet are same.

14. (currently amended) A method of routing a data packet from a first InfiniBand node to a second InfiniBand node, comprising:

providing Ethernet connectivity to the first InfiniBand node and to the second InfiniBand node;

receiving a data packet from the first InfiniBand node, wherein the data packet includes a destination indicator;

reading the destination indicator;

indicating by the destination indicator that the data packet is to be delivered to the second InfiniBand node; and

delivering the data packet to the second InfiniBand node.

15. (original) The method according to claim 14, wherein the receiving of the data packet from the first InfiniBand node is performed by a remote virtual network interface.

16. (original) The method according to claim 14, wherein the reading of the destination indicator is performed by a detector.

17. (original) The method according to claim 14, wherein the delivering of the data packet to the second InfiniBand node is performed by a routing element.

18. (original) The method according to claim 14, wherein the destination indicator is a destination media access control ("MAC") address.

19. (currently amended) ~~The circuit of claim 18, wherein the global network is an Internet~~ The method according to claim 14, wherein the indicating by the destination indicator that the data packet is to be delivered to the second InfiniBand node is performed by comparing the destination indicator to a known value.

20. (currently amended) ~~The circuit of claim 18, wherein the packet transfer device is a server~~ The method according to claim 19, wherein the known value is a range of media access control ("MAC") addresses.

21. (currently amended) ~~The circuit of claim 18, wherein the packet transfer device is a computer~~ The method according to claim 14, wherein the method further includes virtualizing the remote virtual network interface by implementing microcode in a network processor.

22. (currently amended) ~~The circuit of claim 18, wherein the VLAN is created at a LAN switch~~ The method according to claim 14, wherein the method further includes virtualizing the remote virtual network interface by implementing microcode in a set of integrated circuits.

23. (currently amended) ~~The circuit of claim 18, wherein the VLAN is created at an endsystem~~ A program code storage device, comprising:

a machine-readable storage medium; and

machine-readable program code, stored on the machine-readable storage medium, the machine-readable program code having instructions to

provide Ethernet connectivity to a first InfiniBand node and to a second InfiniBand node,

receive a data packet from the first InfiniBand node, wherein the data packet includes a destination indicator,

read the destination indicator,

indicate by the destination indicator that the data packet is to be delivered to the second InfiniBand node, and

deliver the data packet to the second InfiniBand node.

24. (original) The program code storage device according to claim 23, wherein a remote virtual network interface receives the data packet from the first InfiniBand node.

25. (currently amended) ~~The circuit of claim 24, wherein the global network is the Internet~~ The program code storage device according to claim 23, wherein a detector reads the destination indicator.

26. (currently amended) ~~The circuit of claim 24, wherein the packet receiving device is a server~~ The program code storage device according to claim 23, wherein a routing element delivers the data packet to the second InfiniBand node.

27. (currently amended) ~~The circuit of claim 24, wherein the packet receiving device is a computer workstation~~ The program code storage device according to claim 23, wherein the destination indicator is a destination media access control ("MAC") address.

28. (currently amended) ~~The circuit of claim 24, wherein the first and second VLANs are created at a LAN switch~~ The program code storage device according to claim 23, wherein the instructions to indicate by the destination indicator that the data packet is to be delivered to the second InfiniBand node are performed by comparing the destination indicator to a known value.

29. (currently amended) ~~The circuit of claim 24, wherein the first and second VLANs are created at an endsystem~~ The program code storage device according to claim 28, wherein the known value is a range of media access control ("MAC") addresse

30. (original) The program code storage device according to claim 23, wherein the remote virtual network interface is virtualized by implementing microcode in a network processor.

31. (original) The program code storage device according to claim 23, wherein the remote virtual network interface is virtualized by implementing microcode in a set of integrated circuits.